

REMARKS

The Examiner has renumbered the claims from 20-35 to 17-32. Applicants thank the Examiner for the courtesy shown in doing so. Applicants have attached the claims as pending as an appendix for the Examiner's convenience.

Response Under 35 U.S.C. § 121

The Examiner has required restriction to one of the following groups of claims under 35 U.S.C. §121:

Group I: Claims 17, 27, and 28, drawn to a biological tissue comprising endothelial cells which may be induced to generate a compound which down-regulates the expression of a cell adhesion molecule, wherein the compound is a polynucleotide complementary in sequence to part of the adhesion molecule gene.

Group II: Claims 17, 27, and 28, drawn to a biological tissue comprising endothelial cells which may be induced to generate a compound which down-regulates the expression of a cell adhesion molecule, wherein the compound is a mRNA that encodes the cell adhesion molecule.

Group III: Claims 17, 27, and 28, drawn to a biological tissue comprising endothelial cells which may be induced to generate a compound which down-regulates the expression of a cell adhesion molecule, wherein the compound is a polynucleotide comprising a ribozyme sequence that specifically target a gene or mRNA.

Group IV: Claims 17, 18, 27, 28, and 31, drawn to a biological tissue comprising endothelial cells which may be induced to generate a compound which down-regulates the expression of a cell adhesion molecule, wherein the compound is a polypeptide with specific binding affinity for the cell adhesion; and a method of expression the polypeptide.

Group V: Claims 19-24, drawn to a polypeptide comprising a binding region and a signaling region.

Group VI: Claims 25-26, drawn to a polynucleotide and a vector comprising the polynucleotide.

Group VII: Claims 29 and 30, drawn to a non-human animal comprising a biological tissue comprising endothelial cells which may be induced to generate a compound which down-regulates the expression of a cell adhesion molecule, wherein the

compound is a polynucleotide complementary in a sequence to part of the adhesion molecule gene.

Group VIII: Claim 29 and 30, drawn to a non-human animal comprising a biological tissue comprising endothelial cells which may be induced to generate a compound which down-regulates the expression of a cell adhesion molecule, wherein the compound is a mRNA that encodes the cell adhesion molecule.

Group IX: Claims 29 and 30, drawn to a non-human animal comprising a biological tissue comprising endothelial cells which may be induced to generate a compound which down-regulates the expression of a cell adhesion molecule, wherein the compound is a polynucleotide comprising a ribozyme sequence that specifically target a gene or mRNA.

Group X: Claims 29 and 30, drawn to a non-human animal comprising a biological tissue comprising endothelial cells which may be induced to generate a compound which down-regulates the expression of a cell adhesion molecule, wherein the compound is a polypeptide with specific binding affinity for the cell adhesion.

Group XI: Claims 32, drawn to a method of transplantation in an animal.

In response, solely to be responsive to the requirement for restriction, applicants hereby elect Group IV, claims 17-18, 27-28, and 31, with traversal.

Although Applicants are making the above election to be fully responsive to the Requirement for Restriction, Applicants respectfully traverse the Requirement and reserve the right to petition therefrom under 37 C.F.R. §1.144. In particular, Applicants respectfully request reconsideration of the Restriction Requirement to allow prosecution of groups V, VI, and X with elected group IV.

Initially, Applicants note that unity of invention was *not* previously found lacking in the Written Opinion mailed October 13, 2000, or the International Preliminary Examination Report, completed March 8, 2001, which was based on the International Search Report mailed June 19, 2000. Applicants further note that the Examiner, while stating that "Groups II-X differ from group I in that they are different products", has not set forth any grounds differentiating Groups IV, V, VI, and X (or any other Groups).

Groups IV, V, VI, and X relate to a peptide or polypeptide that specifically binds to a cell adhesion molecule. As stated in the International Preliminary Examination Report completed on March 8, 2001, "none of the available prior art documents

appears to refer to . . . a protein capable of binding to the cell adhesion molecules in the (donor) tissue." See Additional Remarks Item V, No. 3. Thus, Applicants respectfully submit that Groups IV, V, VI, and X are linked by a special technical feature, as explained in 37 C.F.R. § 1.475.¹ The claims of Group IV (product claims) are directed to cells that contain the proteins of Group V and nucleic acids of Group VI, which can be used to generate the animal of Group X. Accordingly, all of the claims are directed to products that depend on the same inventive feature except for claim 31. This claim properly joins a method claim that employs one such product (a polypeptide that binds to a cell adhesion molecule) to generate the claimed cells, i.e., a product and use of the product.

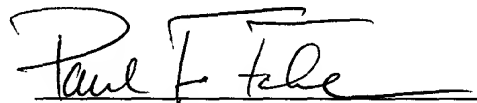
As a practical matter, Applicants respectfully submit that the Groups designated by Applicants do not warrant separate examination and search. Groups IV, V, VI, and X represent a web of knowledge and continuity of effort that merits examination in a single application. In particular, Group V is directed to the polypeptide present in the cells or biological tissue of Group IV. Indeed, the method of claim 31 (part of Group IV) involves expressing the polypeptide of claim 19 (Group V). The claims of Group VI are directed to nucleic acids encoding the polypeptides of Group V, which

¹ While Applicants assert that Groups IV, V, VI, and X are linked by a special technical feature, Applicants in no way imply that any of the remaining groups are not so linked or that the cited groups are novel over the prior art *only* with respect to any one special technical feature set forth above.

nucleic acids are also present in the cells or biological tissue. Group X is directed to a non-human animal comprising the cells or tissue of Group IV. Thus, the search and examination of these groups are necessarily co-extensive, and in any event would involve such interrelated art that the search and examination of the entire application can be made without undue burden on the Examiner.

Accordingly, Applicants respectfully request that the Examiner modify the Requirement for Restriction and examine claims of Groups IV, V, VI, and X. If such a modification is made, Applicants' response will be to elect those claims without traversal.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Paul F. Fehlner", with a horizontal line underneath.

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